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Research Note

Response to Matthews *et al.* (2001) vegetation of the Tembe Elephant Park, Maputaland, South Africa

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The contribution of Matthews *et al.* (2001) to our knowledge of the vegetation of Tembe Elephant Park (TEP) is both valuable and timely. Tembe is at the epicentre of the Maputaland Centre of Endemism (Van Wyk 1994), which, together with the Pondoland Centre, is likely to be recognised in the near future as a global biodiversity hotspot by Conservation International (S Frazee pers. comm.). Currently there are only 25 of these areas of exceptional diversity and endemism which are also substantially transformed by humans (Myers 1990). As such, Maputaland is soon likely to become the focus of local and international efforts to consolidate and extend conserved areas in the entire Maputaland-Pondoland region, and to be effective this process requires good information on distribution of biota and ecosystems. Within the KwaZulu-Natal political boundaries the KZN Nature Conservation Service is already in the process of consolidating conserved areas (P Goodman pers. comm.). Matthews *et al.* (2001) acknowledge that in terms of uniqueness, endemism and area conserved, the Sand Forests of Tembe Elephant Park (TEP) are of particular conservation importance. Unfortunately the authors fail to properly place these forests in a regional context. They imply that South African dry forests are essentially the same as the southern Mozambican dry forests, using Myre's (1964) title of '*Licuati*' Forest interchangeably with Sand Forest. While there are undoubtedly strong floristic links to the dry forests of southern Mozambique, and even to dry forests extending up the east coast into Tanzania (Tinley 1967, Tinley 1977, Moll and White 1978, Burgess and Clarke 2000), the turnover in species composition between South Africa and Mozambican forests less than 100km to the north appears to be considerable. A comparison of Matthews *et al.* (2001) and Myre's (1964) species lists shows this clearly. Myre (1964) lists 20 important tree species and genera for *Licuati* subtype 1.0 (forest). Of these, only five species occur in Matthews' *et al.* (2001) list of 37 woody species associated predominantly with Sand Forest (from species groups A, B and C in their phytosociological table). The most important Sand Forest canopy dominant at TEP, *Cleistanthus schlechteri* (Kirkwood and Midgley 1999) is not recorded by Myre (1964) for *Licuati* Forest. In contrast, the turnover in dominant species across the South African range of Sand Forest is remarkably low, with *C. schlechteri* and *Newtonia hildebrandtii* contributing 40% to 50% of total importance (an index combining dominance and density) at most sites. Turnover of subdominant species is higher, and to some extent associated with forest stature, but essentially South African Sand Forests are very similar to one another (Kirkwood and Midgley 1999). Given the high conservation importance of the Maputaland Centre and dry forests worldwide (e.g. Mooney *et al.* 1995), it is essential that the forests of southern Mozambique are properly surveyed and conserved. If these forests are regarded as similar or equivalent to South African Sand Forest, as suggested by Matthews *et al.* (2001), they are unlikely to receive the urgent attention they deserve.

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